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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,861	02/08/2005	Stan Nowak	ASEFF.0101	6378
7590	01/20/2006		EXAMINER	
Carsten & Cahoon P O Box 802334 Dallas, TX 75380			BURCH, MELODY M	
			ART UNIT	PAPER NUMBER
			3683	
DATE MAILED: 01/20/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/511,861	Applicant(s) NOWAK ET AL.	
	Examiner Melody M. Burch	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/10/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/28/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 1. The phrase "said braking surface" in the last two lines of the claim lack proper antecedent basis. Additionally, "said fluid" in the last line of the claim is indefinite since it is unclear whether Applicant intends to refer to the volume of fluid sealed in the cavity or the fluid flowing to thereby cool the housing. Finally, it is unclear to the Examiner whether the "cooling fluid" in the last line of the claim is intended to be the same or different from the fluid flowing to thereby cool the housing.

The remaining claims are indefinite due to their dependency from claim 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by DE-1160319 (DE'319).

Re: claims 1-3 and 5-7. DE'319 shows in the figure a fluid cooled brake housing 10 including at least a casing defining a sealed cavity (sealed via element 32) for housing one or more friction pads 15, the casing having one or more walls, at least one of said walls provided with an internal fluid flow path, a fluid inlet 24 in fluid communication with the fluid flow path, and a fluid outlet 29 in fluid communication with the fluid flow path whereby when a fluid supply is coupled with the fluid inlet, fluid flows through at least one of the one or more walls via the fluid inlet, fluid flow path and fluid outlet thereby cooling the housing, wherein a volume of fluid or air is sealed within the cavity and at least partially covering the braking surface as shown the fluid separate from cooling fluid.

Re: claims 4 and 14. DE'319 shows the housing further including sealing means 32 for sealing the sealed cavity when the housing is mounted on an axle shown supported within elements 20 to provide a wet brake housing.

Re: claims 8 and 11-13. DE'319 shows in the figure a fluid cooled brake system including a fluid cool brake housing 10 having a casing defining a sealed cavity that is

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sealed via element 32, the casing having one or more walls, at least one of the walls provided with an internal fluid flow path, and a fluid inlet 24 and outlet 29 each in fluid communication with the fluid flow path as shown, one or more brake pads 15 disposed in the cavity as shown, braking surface of element 15 located within the cavity as shown, an actuator 12 for selectively moving the one or more pads into contact with the braking surface, and a supply of cooling fluid external of the cavity and in fluid communication with the fluid inlet and the fluid outlet, whereby the cooling fluid circulates through the supply, the fluid inlet, fluid flow path and fluid outlet.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE'319 in view of US Patent 5445242 to Pogorzelski et al.

Re: claim 9. DE'319 is silent with regards to how the cooling fluid is circulated. Pogorzelski et al. teach in figure 1 a pump 94 for pumping the cooling fluid through the supply and the fluid flow path.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified one of the ends of the fluid inlet of DE'319, to have been connected to a pump, as taught by Pogorzelski et al., in order to provide a

means of circulating the cooling fluid through the cooling system in order to effectively prevent overheating of the brake device.

Re: claim 10. DE'319 is silent with regards to a heat exchanger being in fluid communication with the supply for cooling the cooling fluid.

Pogorzelski et al. teach in figure 1 a brake device including a heat exchanger 96 in fluid communication with the supply for cooling the cooling fluid.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the cooling system of DE'319 to have included a heat exchanger, as taught by Pogorzelski et al., in order to provide a means of controlling heat dissipation within the system.

Response to Arguments

8. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mmb
January 13, 2006

Melody M. Burch
Melody Burch
Primary Examiner
1/13/06